



# NASA Financial Management Manual

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## FMM 9060    ACCRUAL ACCOUNTING

### **9061-1    PURPOSE**

This chapter sets forth basic principles, requirements and techniques for NASA accounting on an accrual basis, whereby financial transactions are recorded in the period of occurrence, even though related cash is disbursed or received during another period. Use of the accrual method provides NASA management with financial data related to performance so that informed decisions may be made. The instructions for the accrual of contract purchase order and grant costs are contained in FMM Appendix 9061-5A, which may be reproduced and distributed to personnel outside the Financial Management Office.

### **9061-2    AUTHORITY**

31 USC 3512(e)

### **9061-3    SCOPE**

The accrual method of accounting applies to all costs, however classified, deferred, or disposed of; to current expense (operating costs), reimbursable costs, inventory costs, prepaid costs, or fixed asset costs; and to all revenue, whether appropriation reimbursements or miscellaneous receipts are involved.

### **9061-4    RESPONSIBILITIES**

The Center Deputy Chief Financial Officer, Finance (DCFO (F)) is responsible for implementing proper procedures and ensuring reliable accruals, including approving accruals developed by personnel outside the Financial Management Office.

### **9061-5    GENERAL REQUIREMENTS**

- a. **METHOD.** Generally accepted accounting methods will be used in developing accruals. Accruals will be recorded in the appropriate accounts as of the end of each month. Simplified methods for monthly accruals such as inventories of documents and estimates based on previous experience may be used when demonstrated to be reasonably reliable.
- b. **FISCAL YEAR-END.** Special efforts shall be made at the end of the fiscal year to ensure the accounts reflect complete and accurate data. These efforts shall be applied to all cost categories identified in this chapter and FMM Appendix 9061-5A.

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Fiscal year-end accruals for contracts, purchase orders and grants shall include estimates for the period from the end of contractors' accounting periods, as shown on NF 533M and Q reports, to September 30, adjustments for costs accrued by the straight-line method on grants, as determined by analysis of the June 30 SF 272 (FMM Appendix 9061-5A5.), and a careful examination of other contracts and purchase orders to ensure that the year-end accrual includes amounts for any bills currently on hand or anticipated, which are material in amount and relate to work performed by September 30.

Audits of NASA's financial statements will include an examination of a sample of invoices and contract financing requests paid in the months following the end of the fiscal year to determine if amounts paid relate to work performed and accrued prior to the year-end; findings from this sample will be extrapolated to the Agency's entire universe of payments for those months and adjustments in NASA's accounts payable may be recommended. DCFO (F)s need to ensure that estimates are made and accrued for all material amounts related to such work, so that the financial statements are materially correct as of September 30, and subsequent Agencywide adjustments are not necessary.

- c. **DOCUMENTATION.** Documents reflecting computations and support for accruals and analyses of the accuracy of the accruals, as required by FMM Appendix 9061-5A.3.a. (4), shall be retained for reference and audit.

## **9061-6 BASES FOR ACCRUALS**

### **a. PERSONNEL COMPENSATION, PERSONNEL BENEFITS AND RELATED PAYMENTS (OBJECT CLASS CODE (OCC) 11, 12, 13, 14, 15, 16 and 17)**

- (1) Gross compensation (OCC 11), including overtime, will be accrued through the end of each month. A labor distribution system may be used to distribute actual charges to cost accounts and to credit accounts payable. A monthend record cutoff shall be made if practicable, such as where daily time records are kept and the only additional effort required is an interim cutoff and report. If a record cutoff is not feasible or the labor distribution to cost accounts does not vary significantly from payroll period to payroll period, the cost distribution of a representative preceding payroll or the total annual payroll to date may be used in determining the current accrual. Labor cost accruals will be distributed to the appropriate benefiting project(s) and functions.

Merit bonuses and awards, if significant in amount, will be accrued in the month in which the Financial Management Office is notified of the liability for payment.

The cost of unused annual leave, compensatory time and credit hours earned will be accrued at fiscal yearend, based upon the difference between the leave liabilities at the end of the prior and current fiscal years.

- (2) Benefits (OCC 12 and 14), including NASA contributions to Social Security, retirement funds, the Thrift Savings Plan, and group health and life insurance programs will be accrued in the same manner as gross compensation.

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Other benefits, such as relocation-related real estate costs and personnel allowances, shall be accrued in the month in which notification of the liability for payment is received.

- (3) Payments to the Office of Personnel Management for reemployed annuitants and severance pay for former employees (OCC 13) will be accrued in the same manner as gross compensation.
- (4) Recruitment and relocation bonuses and retention allowances shall be accrued in the month in which the Financial Management Office is notified of the requirement for payment.

## **b. TRAVEL AND TRANSPORTATION OF PERSONS (OCC 21)**

- (1) Accruals for transportation, per diem and miscellaneous costs will be based upon the estimated cost of the trip and accrued in entirety in the month the travel commences. Accrued costs will be adjusted to actuals when invoices and travel vouchers are paid. At fiscal yearend, recorded per diem and miscellaneous costs will be reduced by the amount of travel not performed during the fiscal year.
- (2) Travel costs not documented by travel orders, such as contracts for the rental of passenger-carrying vehicles not associated with TDY travel will be based upon contractor billings or estimated.
- (3) Permanent change of station travel and transportation costs shall be accrued when incurred.

## **c. TRANSPORTATION OF THINGS (OCC 22).**

Costs evidenced by copies of Government Bills of Lading (GBL) issued to carriers will be accrued in the month the GBL is issued, concurrent with the obligation. At the end of the fiscal year, accrual of costs not covered by GBL's will be based upon billings received or other reliable notices that transportation has been accomplished.

## **d. RENTS, COMMUNICATIONS, AND UTILITIES (OCC 23)**

- (1) Accruals for leases and rents will be based upon lease or rental agreements. In the absence of language to the contrary, 1/12 of the total annual rent shall be accrued each month.
- (2) Accruals for communications and utility service costs shall be based upon billings received. If billings are not available or usage fluctuates significantly, meter readings or estimates of usage will be obtained and priced according to the appropriate schedule of charges.

## **e. OTHER CONTRACTUAL SERVICES (OCC 25).**

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Costs of contracted services will be accrued as of the end of the month during which the services are performed. If invoices covering the services have not been received or approved, the accrual will be estimated, based upon the known level of activity, previous billings, or the estimates of cognizant NASA personnel.

## **f. SUPPLIES AND MATERIALS (OCC 26)**

- (1) Accruals will be based upon invoice prices, when available or receiving reports using purchase order prices.
- (2) Direct project or program support purchases for which the end use classification is predetermined will be accrued to the appropriate end use classifications in the month received.
- (3) Stores and standby stock will be accrued initially against the applicable inventory carrier account.
- (4) All invoices supported by receiving reports and all receiving reports will be accrued.

## **g. GRANTS, SUBSIDIES, AND CONTRIBUTIONS (OCC 41).**

Since NASA policy is to provide advance payment on grants, cost accruals will be made as discussed in Appendix 9061-5A. Subsidy and contribution costs will be recorded in the month in which administratively approved for payment.

## **h. CONTRACTS AND PURCHASE ORDERS.**

Instructions regarding the accrual of contract costs and purchase orders are contained in Appendix 9061-5A.

## **i. MINOR ITEMS.**

Minor items of a petty cash nature and such things as COD deliveries may be recorded as costs when payment or final settlement is made without regard to the specific period of actual use.

## **j. MISCELLANEOUS REVENUE.**

Revenue shall be accrued in the month in which it is earned. Unrecorded accounts receivable estimated to aggregate less than \$10,000 need not be accrued at the end of each month, except at the end of the fiscal year.

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## **9061-5A ACCRUAL OF CONTRACTS, PURCHASE ORDERS AND GRANTS**

1. Purpose
2. Background
3. Accruals for Cost-Type Contracts
  - a. Contracts with NASA Form 533 Reporting
  - b. Unfilled Orders
  - c. Termination Liability
  - d. Discounts
  - e. Award and Incentive Fees
  - f. Contracts without NASA Form 533 Reporting
4. Fixed-price Contracts and Purchase Orders
  - a. Contracts and Purchase Orders Requiring Specific Performance
  - b. Contracts and Purchase Orders for "Off-the-Shelf" Items
  - c. Purchase Orders With Other Government Agencies
5. Advance-funded Grants and Contracts
6. Cost Curves

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## 9061-5A ACCRUAL OF CONTRACTS, PURCHASE ORDERS AND GRANTS

### 1. PURPOSE

This Appendix provides guidance for the accrual of contract, purchase order and grant costs and may be reproduced and distributed to personnel outside the Financial Management Office who are involved in the cost accrual process. Questions regarding acceptable accrual methodologies shall be directed to the Center Financial Management Office.

### 2. BACKGROUND

The NASA accounting system is on the accrual basis, i.e., revenues are recorded in the accounts when earned and expenses are recorded when incurred, even though the cash involved in a transaction is received or disbursed at another date. Use of the accrual method is mandated by 31 U.S.C. 3512(d) and is intended to provide NASA management with more accurate financial data related to project performance and a more realistic picture of the Agency's financial position so that sound budgets can be developed and informed decisions may be made and NASA's financial statements properly reflect its financial status. Every practicable effort shall be made to ensure contract cost accruals are as accurate as possible.

### 3. ACCRUALS FOR COST-TYPE CONTRACTS

Under cost-type contracts, the contractor performs in accordance with instructions and specifications prior to delivery and Government acceptance of the product. In such cases, the accrual takes place as the work is performed, since constructive receipt of the end product occurs during each accounting period as the contractor earns a portion of the contract price. The same concept applies to prime contractor accruals of subcontract costs.

The Deputy Chief Financial Officer, Finance (DCFO (F)) is responsible for the accuracy of the cost accrual data. Normally, NASA Contractor Financial Management Reports (533M and Q reports; referred to generically as "533 report(s)") will be submitted to the DCFO (F). The DCFO (F) will develop the accrual and, after providing sufficient opportunity for input from cognizant personnel outside the Financial Management Office, enter the accrual in the accounting system. If accruals are developed by personnel in organizations other than the Financial Management Office, such as resources personnel, they shall not be entered in the accounting system without the DCFO (F)s approval.

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## a. CONTRACTS WITH NASA FORM 533 REPORTING

- (1) When submittal is contractually required, the NASA Form 533M and Q reports will be the basis for the cost accrual. (See NPD 9501.1, "NASA Contractor Financial Management Reporting System," and NPG 9501.2\_, "NASA Contractor Financial Management Reporting," for detailed information on NASA Form 533M and Q reporting.) The monthly report (533M) is due ten (10) operating days after the close of the contractor's accounting period or as negotiated. No due dates shall be later than the date by which the Center DCFO (F) requires the reports for entering accrued cost data in the accounting system.

The 533 report is not normally received in time to permit recording of the contractor's actual costs for the current month. The accrual is based on the cumulative actual cost through the end of the prior month plus the contractor's estimate for the current month. This includes a retroactive "adjustment," made to align the previously accrued cost with the subsequently reported actual cost.

- (2) Contractors' accounting periods commonly differ from the calendar month basis used for NASA accounting. Monthly cost accruals, however, need not include an estimate for the cost to be incurred during the period from the end of the contractor's accounting period to the end of the month, except at the end of the fiscal year.
- (3) If monthly analysis of the accuracy of a contractor's estimates indicates they are usually significantly inaccurate, appropriate corrective actions shall be promptly taken to ensure that future estimates are reasonably accurate. In the interim, the reported estimates may be increased or decreased to improve the accuracy of the Center's accruals. If, for a given month, there is other reason to believe that the contractor's estimate will be significantly inaccurate, that estimate may be increased or decreased to improve the accuracy of the accrual for the month. Any such adjustments, whether for an individual month or a period of months, are exceptions and must be explained to the DCFO (F)'s satisfaction and documented prior to entry of the accrual in the accounting system. The documentation supporting the adjustment shall be retained in the Financial Management Office. If it is necessary to make adjustments to a contractor's estimates for a number of months while corrective actions are implemented to improve the accuracy of the estimates, the effect of such adjustments should be analyzed each month to ensure they are resulting in more accurate accruals. Contractor's actual costs shown on the 533 reports shall not be adjusted in developing cost accruals.



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- (4) Each month the DCFO (F) shall track the timeliness of receipt of the 533 reports and the accuracy of accruals. Basic quality measures shall be established to evaluate performance. A monthly analysis shall be performed for those contracts which account for the majority of the Center's total monthly accrued cost. FMM Appendix 9061-5B provides the format to be used. Variance rates shall be calculated; narrative comments explaining rates in excess of  $\pm 5$  percent shall be part of the analysis. These measures assess the accuracy of Center accruals and contractor estimates. Performance shall be tracked against established goals. Center DCFO (F)'s shall regularly review these metrics, along with data assessing timeliness of 533 report submission, with CFO's.

The DCFO (F) shall notify the contracting officer when contractors' 533 reports are frequently late or the estimates reported show consistent, significant variances to subsequently reported actuals, so that the contracting officer may pursue corrective action.

- (5) NASA Form 533 reports should be structured to facilitate accrual accounting in accordance with NASA's Agencywide Coding Structure (AWCS), in categories that directly relate to the proper funding appropriations. Reporting structures should be designed to also provide cost data in the program/functional management classifications by which NASA managers relate in-house activity. NPD 9501.1, "NASA Contractor Financial Management Reporting System," and NPG 9501.2, "NASA Contractor Financial Management Reporting," provide requirements and guidance regarding the development of NF 533 reporting structures. Where a direct correlation between the reporting categories and the Agencywide Coding Structure is not feasible, a cost distribution formula should be developed, documented, approved by the DCFO (F) and consistently applied. The distribution methodology should reflect the work being performed by the contractor and ensure matching of costs to the proper funding appropriation. The DCFO (F) shall periodically review allocations made to ensure conformance with Agency costing policy and the approved contract methodology.
- (6) Costs shall be accrued in accordance with these instructions and generally accepted accrual accounting principles regardless of whether they exceed cumulative obligations on the contract. In such cases, the nature of the difference should immediately be determined and corrective action shall be taken.

- b. UNFILLED ORDERS.** Unfilled orders are the difference between cumulative costs incurred to date and the amounts obligated to any sellers, and may consist, for the prime contractor, of open purchase orders (including negotiated changes), against which materials have not been received or services have not yet been rendered. The difference between a subcontractor's actual costs reported by the prime and the fund limitations for the subcontractor may also be included. Subcontractor's unfilled orders may contain the same items. Since unfilled orders do not represent cost incurred to date, they shall not be accrued.

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- c. **TERMINATION LIABILITY.** Termination liability, if reported by a contractor, represents the contractor's estimate of costs incident to stopping work on the contract, in the event of termination. Since these are not costs incurred to date, they **shall not** be accrued.
- d. **DISCOUNTS.** The final cost to the Government for the contract will be reduced by the amount of discounts taken for prompt payment, so cost accruals shall reflect the total amount of cost and fee incurred on the contract per the 533 report, less the amount of discounts taken. Accrual adjustments for discounts shall be clearly documented each month, and the documentation retained in the Financial Management Office to provide an audit trail from the 533 report to the amount accrued in the accounting system.
- e. **AWARD AND INCENTIVE FEES.** Fees shall be accrued as earned and reported on 533 reports or billed by contractors. In the case of award fees, only the base fee shall be accrued each month, unless historical evidence exists to support accrual of an estimated portion of the award fee. Incentive fees shall be accrued when earned in accordance with the incentive fee provisions in the contract. Any accrual adjustments for fees shall be clearly documented each month, and the documentation retained in the Financial Management Office, to provide an audit trail from the 533 report to the amount accrued in the accounting system.
- f. **CONTRACTS WITHOUT NASA FORM 533 REPORTING.** When 533 reports are not required, monthly accruals will be based upon the most appropriate, reliable data available, such as recent statements of costs, contractor billings, cost curves, (see paragraph 6), or other reasonable projections. When the contract provides for advance payments, monthly cost accruals may be based upon the recipient's forecast of cash requirements reported on the quarterly Federal Cash Transactions Report, SF 272.

For contracts awarded under the Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) programs, monthly cost accruals may be developed using the straight-line method. The monthly accrual would equal the contract amount divided by the number of months in the period of performance. This equal monthly accrual mirrors the stable cost pattern inherent to the SBIR and STTR contracts. However, amounts accrued through August 31 on a straight-line basis shall be compared to contractor billings, invoices, or other payment request data through that date and adjustments made as necessary to bring the cumulative accrual into agreement with the payment data submitted by the contractors, so that the amount of the accrual as of September 30 is as accurate as possible.

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## 4. **FIXED-PRICE CONTRACTS AND PURCHASE ORDERS**

- a. **CONTRACTS AND PURCHASE ORDERS REQUIRING SPECIFIC PERFORMANCE.** Accruals for fixed-price contracts and purchase orders requiring performance in accordance with specific contractual instructions or specifications as opposed to goods available for sale to the general public, shall be based upon the constructive receipt concept discussed in 3, above. Since monthly reporting is not normally required for fixed-price contracts and purchase orders requiring specific performance, cost accruals shall be based upon the most reliable information available, such as progress billings, estimates prepared by operating personnel on the basis of personal knowledge or observation of work, estimates computed on the basis of review and analysis of data contained in contract files, or cost curves (see 6., below).
- b. **CONTRACTS AND PURCHASE ORDERS FOR "OFF-THE-SHELF" ITEMS.** Accruals for fixed-price orders for products which the contractor has available for sale to others will be made when the Government receives and takes title to the goods, including instances where the contractor delivers the goods to a carrier acting on the Government's behalf. Accruals will be based upon receiving reports, invoices or similar documents. A percentage of the total contract value may be used for partial deliveries if documentation is not available.
- c. **PURCHASE ORDERS WITH OTHER GOVERNMENT AGENCIES.** Cost accruals for purchase orders with other Government agencies shall be based upon the most reliable data available, including NASA Defense Purchase Requests, (NASA Form 523), receiving reports, and cost estimates obtained from the Government agency involved. Where possible, 533 reports will be obtained from other Government agencies' prime contractors performing NASA work. Estimates of construction work in place will routinely be obtained from the Department of the Army Corps of Engineers, or other Government agencies. Cost curves may be used to evaluate estimates. Where estimates cannot be obtained from other Government agencies, accruals will be based upon the purchase order terms and prior billings. Estimates will be confirmed by cognizant NASA personnel.

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## 5. ADVANCE-FUNDED GRANTS AND CONTRACTS

Cost accruals on advance-funded grants may be based upon the recipient's drawdowns for the preceding quarter, as reported on the SF 272, or a straight-line calculation. The data reported by each recipient on their June 30 SF 272 shall be compared to the cumulative amount accrued through that date and adjustments made as necessary to bring the accrual into agreement with the data reported by the recipient, so that the amount accrued as of September 30 is as accurate as possible. When 533 reports are required on advance-funded contracts, the 533 reports will be used as the basis for recording cost in lieu of the SF 272.

When SF 272's are not received on a timely basis, action shall be taken as necessary (see FMM 9280) to effect receipt of the required reports. In the absence of SF 272's, the accrual shall be based upon the most reliable data available or an appropriate cost curve. Subsequent estimates shall be adjusted to SF 272 data when reports are received. Each quarter, the DCFO (F) shall track the timeliness of receipt of SF 272 reports in a manner similar to that required for 533 reports (see paragraph 3a. (4) above). In addition, the DCFO (F) should regularly review data assessing timeliness of receipt of SF 272's with the CFO. The DCFO (F) should also notify the Grants Officer in cases of habitual lateness or impending suspension.

## 6. COST CURVES

In the absence of more accurate data, cost curves may be used to calculate accruals. The cost curve selected should be appropriate for the particular contract. Minor modifications and contract change orders may be included in the total contract amount and applied to the curve percentages. Substantial modifications shall be computed independently of the basic contract based upon the appropriate factors.



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## 9061-5B ANALYSIS OF ACCRUED COST

| Contractor Number and Name  | Month/Year | Explanations of Variances |
|---|------------|---------------------------|
| <hr/>   |            |                           |
| A. 1. Center Cumulative Accrued Cost  | _____      |                           |
| 2. Contractor 533 Cumulative Actual Cost  | _____      |                           |
| 3. Variance (1-2)   | _____      |                           |
| 4. Contractor 533 Actual Cost for Month   | _____      |                           |
| 5. % Variance (3/4)   | _____      |                           |
| <i>This analysis provides a comparison of the cumulative accrued cost with the cumulative actual cost reported by the contractor for the same period.</i>   |            |                           |
| <hr/>   |            |                           |
| B. 1. Center Accrued Cost for Month   | _____      |                           |
| 2. Contractor 533 Actual Cost for Month   | _____      |                           |
| 3. Variance (1-2)   | _____      |                           |
| 4. % Variance (3/2)   | _____      |                           |
| <i>This analysis provides a comparison of the cost accrued for the current month with the actual cost reported by the contractor for the same period.</i>   |            |                           |
| <hr/>   |            |                           |
| C. 1. Contractor 533 Estimated Cost for Month   | _____      |                           |
| 2. Contractor 533 Actual Cost for Month   | _____      |                           |
| 3. Variance (1-2)   | _____      |                           |
| 4. % Variance (3/2)   | _____      |                           |
| <i>This analysis provides a comparison of the contractor's estimate for the current month with the actual cost reported by the contractor for the same period.</i>  |            |                           |
| <hr/>   |            |                           |
| D. 1. Center Accrued Cost for Month   | _____      |                           |
| 2. Contractor 533 Estimated Cost for Month  | _____      |                           |
| 3. Variance (1-2)   | _____      |                           |
| 4. Contractor 533 Actual Cost for Month   | _____      |                           |
| 5. % Variance (3/4)   | _____      |                           |
| <i>This analysis provides a comparison of the cost accrued for the current month with the contractor's estimate for the same month; the variance is the amount by which the contractor's NF 533 estimate was "adjusted" in developing the cost accrual for the month.</i> |            |                           |



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## DEFINITIONS AND INSTRUCTIONS - “ANALYSIS OF ACCRUED COST” WORKSHEET:

### DESCRIPTIONS:

**Analysis A** - This analysis provides a comparison of the cumulative accrued cost with the cumulative actual cost reported by the contractor for the same period.

**Analysis B** - This analysis provides a comparison of the cost accrued for the current month with the actual cost reported by the contractor for the same period.

**Analysis C** - This analysis provides a comparison of the contractor’s estimate for the current month with the actual cost reported by the contractor for the same period.

**Analysis D** - This analysis provides a comparison of the cost accrued for the current month with the contractor’s estimate for the same month; **the variance is the amount by which the contractor’s NF 533 estimate was “adjusted” in developing the cost accrual for the month (see FMM Appendix 9061-5A.3.a.(3)).**

### DEFINITIONS:

**Center Cumulative Accrued Cost** - the cumulative contract cost (i.e., contract inception to date) accrued in NASA’s accounting system as of the end of the month being analyzed.

**Contractor 533 Cumulative Actual Cost** – the cumulative actual cost (i.e., contract inception to date) reported on the contractor’s NF 533 for the month being analyzed (Col. 7.c. – 533M, Col. 7.a. – 533Q).

**Contractor 533 Actual Cost for Month** – the monthly actual cost (i.e., cost for the specific month alone) reported on the contractor’s NF 533 for the month being analyzed (Col. 7.a. – 533M).

**Center Accrued Cost for Month** – The amount the Center accrues on a contract for the current month normally includes:

1. An amount to adjust the cumulative accrued costs to the actual costs reported by the contractor for the prior month;
2. The contractor’s estimated costs for the current month

The accrual may also include:

3. An adjustment to the contractor’s estimated costs for the current month, under the conditions set forth in FMM 9061-5A.3.a.(3).

For the purposes of this analysis, the amount entered as “Center Accrued Cost for Month” will **ONLY** include 2 and 3 above.

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**Contractor Estimated Cost for Month** – the monthly cost estimate provided on the contractor's NF 533 for the month being analyzed. This estimate would usually be reported on the prior month's NF 533 (i.e., the estimate for June would appear in Col. 8.a. on the contractor's NF 533 for May).

## **LEVEL OF DETAIL REQUIRED FOR EXPLANATION OF VARIANCE ANALYSIS WORKSHEET:**

This worksheet includes the calculation of four variance analyses (described above). The DCFO (F) is responsible for providing, as part of the analysis, narrative comments explaining **each** of the four variances, which is in excess of 5 percent. The requirement for the explanations ensures an analysis of the cause of the variances so that appropriate action can be taken. If comments obtained from the contractor regarding a condition of the contract are appropriate **and explain** the resulting variance, such comments may be enough. However, comments **solely** from the contractor may not be sufficient in all cases. For example, where the Center is making an adjustment to the contractor's estimate in developing the accrual, the contractor's comments alone will not explain the variance; the analysis should also include **financial management's explanation** of the variance and the adjustment made.

### **EXAMPLE:**

The Analysis of Accrued Cost required by FMM 9061-5A,3.a.(3) is designed to measure the accuracy of the accrual entered into the Agency's accounting system and, where there are variances, quickly pinpoint the reason(s) for their occurrence. The required format, set forth in FMM 9061-5B, helps the Center assess the accuracy of its accruals on its major cost-type contracts to facilitate the regular review of accrual metrics with the Center CFO required by FMM 9061-5A,3.a.(4). It also provides data for Headquarters to evaluate the Center's accrual performance, as part of its quality assurance responsibilities, and the accuracy of Agency cost data. The Analysis will reflect the variance between accrued and actual costs and identify whether the variance was due to the contractor's estimate from the NF 533 or adjustments made to that estimate by the Center. Centers are required to review the Analysis and take corrective actions as appropriate where chronic significant variances occur.

The Analysis is to be completed in accordance with the format and instructions in FMM 9061-5B. Centers should not include the amount they enter to adjust the cumulative accrued costs through the end of the prior month to the prior month's subsequently reported cumulative actual cost as part of their "Center Accrued Cost for Month." Inclusion of this value distorts the percentages and defeats the purpose of the Analysis.

An example to illustrate preparation of the Analysis and its intended use:

Contract NASX-XXXX is ongoing. The Center accrued cumulative cost on this contract of \$130,077,000 as of September 30, 2000. The accrual for the month of September alone was \$1,809,000, based solely upon the contractor's estimate for September, shown on the NF 533 submitted in early September. The contractor's cumulative actual cost through September 30, as subsequently reported on the NF 533 submitted in October, was \$130,828,000; the actual cost for the month of September alone was \$2,560,000. The analysis would be completed as shown in Attachment 1.

Analysis A. reveals that the cumulative cost for this contract was underaccrued by \$751,000 in the Agency's accounting system as of September 30, which represented 29.3 percent of the actual cost for the month of September. We then look to the other analyses to determine the reason(s) for this variance. Analysis B.

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shows that the amount accrued in the Agency accounting system for the month of September alone was \$751,000 less than the actual costs incurred for September. Since the variance in B. equals that in A., this means that the overall cumulative variance shown in A. resulted from the accrual for the month of September, rather than the cumulative effect of variances from a number of months' accruals. Since the variance shown for Analysis C. is the same as that for A. and B., it is clear that the cumulative variance shown in A. and the variance for the month of September shown in B. were both due solely to the inaccuracy of the contractor's estimate for September. There is no variance shown in Analysis D., since the contractor's estimate was used as reported on the NF 533 in preparing the September accrual.

Now the accrual for October is prepared. An adjustment is made to correct the \$751,000 variance in September, i.e., to align the cumulative accrued cost through September with the subsequently reported cumulative actual cost. This adjustment is **not** considered part of the "Center Accrued Cost for Month" for purposes of completing the October Analysis of Accrued Cost worksheet, however. The NF 533 submitted in early October shows the contractor's estimate for October to be \$1,388,000. Shortly before the accrual is made, however, the analyst obtains information that the estimate includes \$250,000 for equipment no longer expected to be delivered in October. The analyst decides, therefore, that the accrual for the month of October will be \$1,388,000 less \$250,000, or \$1,138,000. The actual for the month of October, as reported on the NF 533 submitted in November, turns out to be \$1,575,000; the equipment was, in fact delivered in October and more work was performed than expected. The Analysis for the October accrual is shown in Attachment 2.

The October analyses of accrued cost show the following:

Analysis A. Cumulative contract cost in the Agency's accounting system was underaccrued as of October 31 by \$437,000, which represents 27.7 percent of the October actual cost.

Analysis B. The \$437,000 underaccrual is due solely to the accrual made in the month of October (indicating the Center properly corrected the prior month's variance). B.3. and B.4. = A.3 and A.5, respectively.

Analysis C. Of the \$437,000 underaccrual, \$187,000 was due to the inaccuracy of the contractor's estimate for October; more work was performed than planned. This represents 11.8 percent of the 27.7 percent cumulative variance.

Analysis D. Of the \$437,000 underaccrual, the remainder, or \$250,000, was due to the analyst's adjustment (reduction) of the contractor's NF 533 estimate for October, based upon information received that indicated equipment would not be delivered in October as planned. The equipment was, however, delivered in October.

It should be noted that C.3. + D.3. = A.3. Also, C.4. + D.5. = A.5. (.1 rounding error is not significant), thus accounting for the total October cumulative variance.





# NASA Financial Management Manual

## ATTACHMENT 1

**Contractor Number and Name: NASX-XXXX, The Contractor**

**Month/Year Explanations of Variances**

**Sep 2000**

|   |       |        |                               |
|---|-------|--------|-------------------------------|
| A. 1. Center Cumulative Accrued Cost  | _____ | 130077 | Contractor's estimate         |
| 2. Contractor 533 Cumulative Actual Cost (Col.7C 533M*)   | _____ | 130828 |                               |
| 3. Variance (1-2)   | _____ | -751   |                               |
| 4. Contractor 533 Actual Cost for Month (Col.7A 533M*)  | _____ | 2560   |                               |
| 5. % Variance (3/4)   | _____ | -29.3% |                               |
| <i>This analysis provides a comparison of the cumulative accrued cost with the cumulative actual cost reported by the contractor for the same period.</i>   |       |        |                               |
| B. 1. Center Accrued Cost for Month   | _____ | 1809   | “                             |
| 2. Contractor 533 Actual Cost for Month (=A4)   | _____ | 2560   |                               |
| 3. Variance (1-2)   | _____ | -751   |                               |
| 4. % Variance (3/2)   | _____ | -29.3% |                               |
| <i>This analysis provides a comparison of the cost accrued for the current month with the actual cost reported by the contractor for the same period.</i>   |       |        |                               |
| C. 1. Contractor 533 Estimated Cost for Month(Col.8A 533M**)  | _____ | 1809   | Contractor worked additional  |
| 2. Contractor 533 Actual Cost for Month (=A4)   | _____ | 2560   | hours not originally planned, |
| 3. Variance (1-2)   | _____ | -751   | to make up schedule           |
| 4. % Variance (3/2)   | _____ | -29.3% |                               |
| <i>This analysis provides a comparison of the contractor's estimate for the current month with the actual cost reported by the contractor for the same period.</i>  |       |        |                               |
| D. 1. Center Accrued Cost for Month (=B1)   | _____ | 1809   |                               |
| 2. Contractor 533 Estimated Cost for Month (=C1)  | _____ | 1809   |                               |
| 3. Variance (1-2)   | _____ | 0      |                               |
| 4. Contractor 533 Actual Cost for Month (=A4)   | _____ | 2560   |                               |
| 5. % Variance (3/4)   | _____ | 0%     |                               |
| <i>This analysis provides a comparison of the cost accrued for the current month with the contractor's estimate for the same month; the variance is the amount by which the contractor's NF 533 estimate was "adjusted" in developing the cost accrual for the month.</i> |       |        |                               |



# NASA Financial Management Manual

## ATTACHMENT 2

**Contractor Number and Name: NASX-XXXX, The Contractor Month/Year**

**Explanations of Variances**

**Oct 2000**

|   |       |            |                               |
|---|-------|------------|-------------------------------|
| A. 1. Center Cumulative Accrued Cost  | _____ | 131,966*** | Contractor's estimate &       |
| 2. Contractor 533 Cumulative Actual Cost (Col.7C 533M*)   | _____ | 132,403    | Center adjustment (see        |
| 3. Variance (1-2)   | _____ | -437       | below)                        |
| 4. Contractor 533 Actual Cost for Month (Col.7A 533M*)  | _____ | 1575       |                               |
| 5. % Variance (3/4)   | _____ | -27.7%     |                               |
| <i>This analysis provides a comparison of the cumulative accrued cost with the cumulative actual cost reported by the contractor for the same period.</i>   |       |            |                               |
| B. 1. Center Accrued Cost for Month   | _____ | 1,138      | “                             |
| 2. Contractor 533 Actual Cost for Month (=A4)   | _____ | 1,575      |                               |
| 3. Variance (1-2)   | _____ | -437       |                               |
| 4. % Variance (3/2)   | _____ | -27.7%     |                               |
| <i>This analysis provides a comparison of the cost accrued for the current month with the actual cost reported by the contractor for the same period.</i>   |       |            |                               |
| C. 1. Contractor 533 Estimated Cost for Month (Col.8A 533**)  | _____ | 1,388      | Contractor worked additional  |
| 2. Contractor 533 Actual Cost for Month (=A4)   | _____ | 1,575      | hours not originally planned, |
| 3. Variance (1-2)   | _____ | -187       | to make up schedule           |
| 4. % Variance (3/2)   | _____ | -11.9%     |                               |
| <i>This analysis provides a comparison of the contractor's estimate for the current month with the actual cost reported by the contractor for the same period.</i>  |       |            |                               |
| D. 1. Center Accrued Cost for Month (=B1)   | _____ | 1,138      | Contractor's 533 estimate     |
| 2. Contractor 533 Estimated Cost for Month (=C1)  | _____ | 1,388      | for Oct reduced by \$250K     |
| 3. Variance (1-2)   | _____ | -250       | based on info that equipment  |
| 4. Contractor 533 Actual Cost for Month (=A4)   | _____ | 1,575      | would not be delivered; it    |
| 5. % Variance (3/4)   | _____ | -15.9%     | was delivered, however        |
| <i>This analysis provides a comparison of the cost accrued for the current month with the contractor's estimate for the same month; the variance is the amount by which the contractor's NF 533 estimate was "adjusted" in developing the cost accrual for the month.</i> |       |            |                               |

\* 533M submitted in October

\*\* 533 M submitted in September

130,077 cum accrual through September  
+751 amount underaccrued through September (see September 2000, Analysis A)

130,828 actual through September per NF533  
+1,138 accrual for month of October (current month)

\*\*\*131,966 cum accrual through October

# NASA Financial Management Manual